

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jeff EDER

Serial No.: 10/645,099

Filed: August 21, 2003

For: AN AUTOMATED METHOD OF AND SYSTEM FOR IDENTIFYING, MEASURING AND ENHANCING CATEGORIES OF VALUE FOR A VALUE CHAIN

Group Art Unit: 3692

Examiner: Sussana Meinecke Diaz

Brief on Appeal

Sir or Madam:

The Appellant respectfully appeals the rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31, claim 32, claim 49, claim 50, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 in the March 5, 2009 Office Action for the above referenced application. The Table of Contents is on page 2 of this paper.

The appeal brief is being sent in response to the notice of non compliant appeal brief mailed on October 28, 2009.

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1. Real party in interest

Asset Reliance, Inc. (dba Asset Trust, Inc.) is the Appellant and the owner of 100% interest in the above referenced patent application.

2. Related appeals

An Appeal for U.S. Patent Application 10/012,375 filed on December 12, 2001 may be affected by or have a bearing on this appeal. An Appeal for U.S. Patent Application 10/097,344 filed on March 13, 2002 may be affected by or have a bearing on this appeal.

3. Status of Claims

Claims claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31, claim 32, claim 49, claim 50, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 are rejected and are the subject of this appeal. Claims 1 through 24 and 41 through 48 were previously cancelled without prejudice. Claim 51 is cancelled herein.

4. Status of Amendments

An Amendment/Reply containing amendments to claim 25, claim 26, claim 27, claim 35, claim 49, claim 54, claim 56, claim 57 and claim 58 was submitted on July 5, 2009 and is incorporated herein.

5. Summary of Claimed Subject Matter

One embodiment of an automated method of and system for identifying, measuring and enhancing categories of value for a value chain is depicted in Figures 1 through 10 of the specification. Figure 1 gives an overview of the major processing steps which include preparing data for use in processing, analyzing the data, evaluating market sentiment, generating reports and identifying potential value improvements.

Independent Claim 25 - A first embodiment of the system for identifying, measuring and enhancing categories of value for a value chain is exemplified in independent claim 25 where a process uses a computer to: prepare data from organization system databases for use in processing, use the data to develop a model that identifies a net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes that will optimize one or more aspects of an organization financial performance. Support for the specific steps contained in the claim can be found in the specification and drawings as detailed below:

The computer system (100) is described in FIG. 3, reference numbers 100, 110, 111, 112, 113,

114, 115, 116, 117, 118, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 131, 132, 133, 134, 135, 136, 137 and 138 and line 7, page 14 through line 2, page 15 of the specification.

a) obtaining data representative of an organization from a plurality of organization system databases in a format suitable for processing where the organization has one or more enterprises - is described in FIG. 5A reference numbers 202, 203, 207, 208, 209 and 211, FIG 5B, reference numbers 221, 222, 225, 226, 209 and 211, FIG 5C, reference numbers 241, 242, 245, 246, 209 and 211, FIG 5D, reference numbers 261, 262, 265, 266, 267, 268, 269, 271, 209 and 211, FIG. 5E, reference numbers 277, 278, 279, 280, 281 and 282, FIG. 5F reference number 291 and 292 and line 16, page 27; though line 17, page 42 of the specification.

b) transforming at least a portion of the data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value - is described in FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, line 29, page 38 through line 14, page 51 and line 5, page 53 through line 33, page 60 of the specification.

c) transforming at least a portion of the data into one or more lists of changes that will optimize one or more aspects of an organization financial performance – is described in FIG. 9, reference numbers 603, 604, 605, 606, 610 and 708 and line 30, page 70 through line 24, page 73 of the specification. As discussed in the specification, the initial calculations are similar to those described in cross referenced U.S. Patent 5,615,109.

d) using the model to analyze the data and output said tangible net contributions – is described in a variety of places including FIG 8, reference numbers 505 and 705, FIG. 9 reference numbers 610 and 708 and line 8, page 66 through line 24, page 73 of the specification.

e) where the categories of value are current operation and a category of value selected from the group consisting of real options, market sentiment and combinations thereof – is described in a number of places including Table 3 on page 10 of the specification.

f) where one or more lists of changes that will optimize one or more aspects of organization financial performance comprise one or more lists of a change to one or more price premiums or to one or more other value drivers – is described on FIG 6A reference numbers 306, 307, 308, 309 and 310, FIG.6B reference number 321 and line 26, page 48 through line 7, page 51 of the specification. The identification of value drivers is also described in Column 23, line 45 through Column 35, line 10 of U.S. Patent 6,321,205 (cross referenced patent application 09/135,983

matured into U.S. Patent 6,321,205). Price premiums are identified as drivers of the value of elements of value in Table 17A, Columns 19 and 20 of U.S. Patent 6,393,406 (cross referenced patent application 08/779,109 matured into U.S. Patent 6,393,406).

Claim 26 - the limitations associated with dependent claim 26 are described in a number of places including Table 3, page 10 and line 20, page 26 through line 26, page 26 of the specification.

Claim 27 - the limitations and activities and associated with dependent claim 27 are described in FIG. 6A reference numbers 301 through 310, FIG. 6B reference numbers 321 and line 1, page 44 through line 8, page 51 of the specification. The activities comprise developing a model that identifies a net contribution of one or more elements of value to an organization value by a category of value.

Claim 28 - the limitations associated with dependent claim 28 are described in a number of places including Table 3, page 10 and line 20, page 26 through line 26, page 26 of the specification.

Claim 29 - the limitations associated with dependent claim 29 are described in a number of places including line 10, page 58, through line 33, page 58 of the specification.

Claim 30 - the limitations and activities associated with dependent claim 30 are described in a number of places including FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, FIG 8, reference numbers 504, 505, 510, 511 and 512; FIG. 9 reference numbers 603, 604, 605 606, 610 and 708, line 29, page 38 through line 33, page 60 of the specification and line 22, page 66 through line 15, page 74 of the specification. The ability to specify other types of analyses are also described in each of the cross referenced patent applications.

Claim 31 - the limitations associated with dependent claim 31 are described in a number of places including FIG. 1, reference numbers 5, 10, 15, 25, 30 and 40, line 18, page 21 through line through line 20, page 21 and line 20, page 26 through line 26, page 26 of the specification.

Claim 32 - the limitations associated with dependent claim 32 are described in a number of places including Table 1 FIG 8, reference numbers 505 and 705, FIG. 9 reference numbers 610 and 708 and line 8, page 66 through line 24, page 73 of the specification.

Independent Claim 49 - A second embodiment of the system for identifying, measuring and enhancing categories of value for a value chain is exemplified in independent claim 49 where an article of manufacture instructs a processor in a computer system to: prepare data from a plurality

of organization system databases for use in processing, analyze the data to identify data that are associated with one or more aspects of financial performance, and generate cluster models that identify a plurality of segments for each category of value, component of value, element of value and market value factor. The clustered data are then used to develop a model that identifies a net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes that will optimize one or more aspects of an organization financial performance. Support for the specific steps contained in the claim can be found in the specification and drawings as detailed below:

The computer system (100) is described in FIG. 3, reference numbers 100, 110, 111, 112, 113, 114, 115, 116, 117, 118, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 131, 132, 133, 134, 135, 136, 137 and 138 and line 7, page 14 through line 2, page 15 of the specification.

a) *using two or more independent components of application software to obtain data representative of an organization from a plurality of organization system databases in a format suitable for processing where the organization has one or more enterprises* - is described in FIG. 5A reference numbers 202, 203, 207, 208, 209 and 211, FIG 5B, reference numbers 221, 222, 225, 226, 209 and 211, FIG 5C, reference numbers 241, 242, 245, 246, 209 and 211, FIG 5D, reference numbers 261, 262, 265, 266, 267, 268, 269, 271, 209 and 211, FIG. 5E, reference numbers 277, 278, 279, 280, 281 and 282, FIG. 5F reference number 291 and 292 and line 16, page 27; though line 17, page 42 of the specification,

b) *transform at least a portion of the data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value* - is described in FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, line 29, page 38 through line 14, page 51 and line 5, page 53 through line 33, page 60 of the specification,

c) *transform at least a portion of the data into one or more lists of changes to one or more value drivers that will optimize one or more categories of value* – is described in FIG. 9, reference numbers 603, 604, 605, 606, 610 and 708 and line 30, page 70 through line 15, page 73 of the specification. As discussed in the specification, the initial calculations are similar to those described in cross referenced U.S. Patent 5,615,109, and

d) *produce one or more additional useful results by analyzing the set of data representative of the organization using one or more predictive models that rely on a set of input data that have been*

transformed into a different state or thing - is described in a number of places including FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, FIG. 9, reference numbers 603, 604, 605, 606, 610 and 708, line 29, page 38 through line 33, page 60 of the specification and line 30, page 70 through line 15, page 73 of the specification. The ability to specify other types of analyses are also described in each of the cross referenced patent applications.

Claim 50 - the limitations associated with dependent claim 50 are described in a number of places including line 1, page 44 through line 26, page 44 of the specification.

Claim 52 - the limitations associated with dependent claim 52 are described in a number of places including FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, line 29, page 38 through line 14, page 51 and line 5, page 53 through line 33, page 60 of the specification.

Claim 53 - the limitations and activities associated with dependent claim 53 are described in a number of places including FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, FIG. 8, reference numbers 504, 505, 510, 511 and 512; FIG. 9 reference numbers 603, 604, 605 606, 610 and 708, line 29, page 38 through line 33, page 60 of the specification and line 22, page 66 through line 15, page 74 of the specification. The ability to specify other types of analyses are also described in each of the cross referenced patent applications.

Claim 54 - the limitations associated with dependent claim 54 are described in a number of places including FIG. 6A reference numbers 306, 307, 308, 309 and 310, FIG. 6B reference number 321 and line 26, page 48 through line 7, page 51 of the specification. The identification of value drivers is also described in Column 23, line 45 through Column 35, line 10 of U.S. Patent 6,321,205 (cross referenced patent application 09/135,983 matured into U.S. Patent 6,321,205). Price premiums are identified as drivers of the value of elements of value in Table 17A, Columns 19 and 20 of U.S. Patent 6,393,406 (cross referenced patent application 08/779,109 matured into U.S. Patent 6,393,406).

Claim 55 - the limitations associated with dependent claim 55 are described in a number of places including FIG. 5A, reference number 203 and line 3, page 29 through line 9, page 30 of the specification.

Claim 56 - the limitations associated with dependent claim 56 are described in a number of places including line 23, page 30 through line 28, page 30 of the specification.

Independent Claim 57 - A third embodiment of the system for identifying, measuring and enhancing categories of value for a value chain is exemplified in independent claim 57 where an article of manufacture instructs a processor in a computer system to: integrate data from organization system databases in accordance with xml and a common schema. The integrated data are then used to develop a model that identifies a net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes that will optimize one or more aspects of an organization financial performance. Support for the specific steps contained in the claim can be found in the specification and drawings as detailed below:

The computer system (100) is described in FIG. 3, reference numbers 100, 110, 111, 112, 113, 114, 115, 116, 117, 118, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 131, 132, 133, 134, 135, 136, 137 and 138 and line 7, page 14 through line 2, page 15 of the specification.

a) *converting, integrating and storing data representative of one or more physical entities or substances from a plurality of disparate sources as required to transform said data into an integrated database using xml and a common schema* - is described in FIG. 5A reference numbers 202, 203, 207, 208, 209 and 211, FIG 5B, reference numbers 221, 222, 225, 226, 209 and 211, FIG 5C, reference numbers 241, 242, 245, 246, 209 and 211, FIG 5D, reference numbers 261, 262, 265, 266, 267, 268, 269, 271, 209 and 211, FIG. 5E, reference numbers 277, 278, 279, 280, 281 and 282, FIG. 5F reference number 291 and 292 and line 16, page 27; though line 17, page 42 of the specification,

b) *transforming at least a portion of the data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value by using the integrated database as a sole source for organization related data* - is described in FIG. 5F reference numbers 291, 292, 293, 294, 295, 296 and 297, FIG. 6A, reference numbers 303, 304, 305, 306, 307, 308, 309 and 310; FIG. 6B reference numbers 321, 323, 328, 329, 330, 331 and 333, FIG. 6C reference numbers 341, 342, 343, 345, 346, 347, 348, 349 and 350, line 29, page 38 through line 14, page 51 and line 5, page 53 through line 33, page 60 of the specification,

c) *transforming at least a portion of the data into one or more lists of changes to one or more value drivers that will optimize one or more categories of value by using the integrated database as a*

sole source for organization related data -- is described in FIG. 9, reference numbers 603, 604, 605, 606, 610 and 708 and line 30, page 70 through line 15, page 73 of the specification. As discussed in the specification, the initial calculations are similar to those described in cross referenced U.S. Patent 5,615,109.

d) where the plurality of disparate sources further comprise data sources selected from the group consisting of a plurality of database management systems, one or more external databases, an Internet and combinations thereof -- is described in Table 3 on page 10 of the specification,

e) where xml comprises a common metadata standard - is described in a variety of places including Table 15 on page 27 of the specification, and

f) where the schema incorporates a common data dictionary - is described in line 1, page 2 through line 18, page 7, Table 15, pages 27 and 28 and line 3, page 29 through line 6, page 30 of the specification. The development and use of a common data dictionary to support data extraction, conversion and storage is also described in line 40, column 35 through line 15, column 38 of cross referenced U.S. Patent 5,615,109.

Claim 58 - the limitations associated with dependent claim 58 are described in a number of places including FIG 6A reference numbers 306, 307, 308, 309 and 310, FIG.6B reference number 321 and line 26, page 48 through line 7, page 51 of the specification. The identification of value drivers is also described in Column 23, line 45 through Column 35, line 10 of U.S. Patent 6,321,205 (cross referenced patent application 09/135,983 matured into U.S. Patent 6,321,205). Price premiums are identified as drivers of the value of elements of value in Table 17A, Columns 19 and 20 of U.S. Patent 6,393,406 (cross referenced patent application 08/779,109 matured into U.S. Patent 6,393,406).

Claim 59 - the limitations associated with dependent claim 59 are described in a number of places including FIG. 1, reference numbers 5, 10, 15, 25, 30 and 40, line 18, page 21 through line 20, page 21 and line 20, page 26 through line 26, page 26 of the specification.

Claim 60 - the limitations and activities associated with dependent claim 60 are described in a number of places including FIG. 5D, reference numbers 265, 266 and 267 and line 10, page 37 through line 28, page 38 of the specification.

Claim 61 - the limitations associated with dependent claim 61 are described in line 10, page 37 through line 18, page 37 of the specification.

Claim 62 - the limitations associated with dependent claim 62 are described in a number of places including line 23, page 30 through line 28, page 30 of the specification.

6. Grounds of rejection to be reviewed on appeal

Issue 1 – Whether the invention described in claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 represent patentable subject matter under 35 USC 101?

Issue 2 - Whether the invention described in claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 represent patentable subject matter under 35 USC 101?

Issue 3 – Whether the invention described in claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 represent patentable subject matter under 35 USC 101?

Issue 4 - Whether claim 62 is enabled under 35 USC 112, first paragraph?

Issue 5 – Whether claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 are indefinite under 35 USC 112, second paragraph?

Issue 6 – Whether claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 are indefinite under 35 USC 112, second paragraph?

Issue 7 - Whether claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 are indefinite under 35 USC 112, second paragraph?

7. The Argument

Grouping of Claims

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

Issue 1 – Whether claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 represent patentable subject matter under 35 USC 101?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of non statutory subject matter for every rejected claim as detailed below.

Errors 1 and 2 - It is well established that “*the burden is on the U.S.P.T.O. to set forth a prima facie case of unpatentability. Therefore if U.S.P.T.O. personnel determine that it is more likely than not that the claimed subject matter falls outside all of the statutory categories, they must provide an explanation.*” (See, e.g., *In re Nuitjen*, Docket no. 2006-1371 (Fed. Circuit Sept. 20, 2007 slip. Op. at 18)). Errors in the claim rejections caused by the apparent failure to establish a prima facie case of non statutory subject matter include:

Error #1) The rejection of independent claim 49 is based on a conclusory statement that the invention described in the claim does not include a transformation. The remaining claims are rejected because they depend on the rejected independent claim. In rejecting the claim, the Examiner failed to explain:

- a) why the transformation of data representative of an organization into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value is not considered a transformation, and/or
- b) why the transformation of data into one or more lists of changes that will optimize one or more aspects of an organization financial performance is not considered a transformation.

An explanation in this regard is particularly important given the fact that the Supreme Court and the CAFC (see *Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008)) have both found the transformation of data regarding real world activities and/or objects into a different state or thing to be statutory subject matter. The failure to provide an explanation supported by evidence leads to the inevitable conclusion that the Examiner has failed to establish a prima facie case that would support a §101 rejection of claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56.

Error #2) The rejection of the listed claims is based on a conclusory statement that the invention described in independent claim does not include a transformation. In rejecting the claim, the Examiner failed to explain why a transformation is required as all the rejected claims are for articles of manufacture and the only known precedential cases that require a transformation relates to process claims. The failure to provide an explanation as to why a transformation is required leads to the inevitable conclusion that the Examiner has failed to establish a prima facie case that would support a §101 rejection of claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56.

In short, the prima facie case of non statutory subject matter has not been properly established for any of the rejected claims.

Errors 3 and 4 – Additional errors in the rejections for non-statutory subject matter are the result of

the fact that the claim rejections are based on at least one conclusory statement that is demonstrably false. Errors in the claim rejections caused by a reliance on apparently false conclusory statements include:

Error #3) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claims does not include any transformations. The claim rejections are in error because this conclusory statement is demonstrably false. The claimed invention transforms organization data into data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value. This error affects claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56.

Error #4) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claims does not include any transformations. The claim rejections are in error because this conclusory statement is demonstrably false. The claimed invention transforms organization data into one or more lists of changes that will optimize one or more aspects of an organization financial performance. This error affects claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56.

The claim rejections are improper because they are based on conclusory statements that are incorrect.

Errors 5 and 6 – The claim rejections are based on 35 U.S.C. §101 which states: *Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.* Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for claim rejection include:

Error #5) Is a failure to acknowledge that the rejected claims meet the statutory requirements for patentability and that there is no requirement for a transformation. The rejected independent claim describe an article of manufacture that develop a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of recommended changes in operation. The model has utility in organization analysis, modeling and management and the lists of changes have utility in improving financial performance. This error affects claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56.

Error #6) Failure to acknowledge the fact that the claim rejections are based on apparent

misrepresentations regarding the teachings of the instant application. These apparent misrepresentations may be a product of the fact that the Examiner does not appear to have the requisite level of skill in the relevant arts (see Evidence Appendix, pages 45 through 56). Affects all claims.

Errors 7 and 8 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of USPTO findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #7) Failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 6 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the non statutory subject matter rejection of claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56, and that as a result the claim rejections fail to meet the substantial evidence standard.

Error #8) Failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the non statutory subject matter rejection of claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) no rational underpinning has been provided to support the legal conclusion of non statutory subject matter (see errors 1 through 4). In particular, there is no rational connection between the transformations completed by the claimed inventions and the conclusory statement that no transformations are being completed,
- b) there is no rational connection between the statutory requirements for statutory subject matter, the agency fact findings and the claim rejections (see errors 5 and 6),
- c) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,085,
- d) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,095,
- e) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,523,047 (see Evidence Appendix, page 57),
- f) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,092,918 (see Evidence Appendix, page 57),

- g) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,240,109 (see Evidence Appendix, page 57), and
- h) prior agency fact-findings have shown that 35 U.S.C. 101 requirements for statutory subject matter are apparently not always applied during the prosecution and allowance of patent applications (U.S. Patent 7,536,332). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on eight errors in the facts and the law. When the eight errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 1 is fifty six (56). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of non statutory subject matter cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case of non-statutory subject matter for a single claim.

Issue 2 - Whether the invention described in claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 represents patentable subject matter under 35 USC 101?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of non statutory subject matter for every rejected claim as detailed below.

Errors 1 and 2 - It is well established that "*the burden is on the U.S.P.T.O. to set forth a *prima facie* case of unpatentability. Therefore if U.S.P.T.O. personnel determine that it is more likely than not that the claimed subject matter falls outside all of the statutory categories, they must provide an explanation.* (See, e.g., *In re Nuitjen*, Docket no. 2006-1371 (Fed. Cir. Sept. 20, 2007)(slip. Op. at 18)). Errors in the claim rejections caused by the apparent failure provide the required explanation include:

Error #1 The rejection of independent claim 25 is based on a conclusory statement that the invention described in the claim does not include a transformation. The other claims under this issue are rejected because they depend on the rejected independent claim. In rejecting the independent claim, the Examiner failed to explain:

- a) why the transformation of data representative of an organization into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value is not considered a transformation, and/or

b) why the transformation of data into one or more lists of changes that will optimize one or more aspects of an organization financial performance is not considered a transformation.

An explanation in this regard is particularly important given the fact that the Supreme Court and the CAFC (see Bilski, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008)) have both found the transformation of data regarding real world activities and/or objects into a different state or thing to be statutory subject matter. The failure to provide an explanation supported by evidence leads to the inevitable conclusion that the Examiner has failed to establish a *prima facie* case that would support a §101 rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32.

Error #2) The rejection of the listed claims is based on a conclusory statement that the invention described in independent claim does not include a transformation. In rejecting the claim, the Examiner failed to explain why a transformation is required after considering the fact that the Supreme Court has specifically stated "*As in Benson, we assume that a valid process patent may issue even if it does not meet [the machine-or-transformation test]*" (*Parker v. Flook*, 437 U.S. at 588-89). The failure to provide an explanation as to why a transformation is required in view of Benson and Flook leads to the inevitable conclusion that the Examiner has failed to establish a *prima facie* case that would support a §101 rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32.

In short, the *prima facie* case of non statutory subject matter has not been properly established.

Errors 3 and 4 – Additional errors in the rejections for non-statutory subject matter are the result of the fact that the claim rejections are based on at least one conclusory statement that is demonstrably false. Errors in the claim rejections caused by a reliance on apparently false conclusory statements include:

Error #3) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claim does not include a transformations. The claim rejections are in error because this conclusory statement is demonstrably false. The claimed invention transforms data representative of an organization into data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value. This error affects claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32.

Error #4) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claim does not include any transformations. The claim rejections are in error because this conclusory

statement is demonstrably false. The claimed invention transforms data representative of an organization into one or more lists of changes that will optimize one or more aspects of an organization financial performance. This error affects claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32.

The claim rejections are improper because they are based on conclusory statements that are incorrect.

Errors 5 and 6 – The “*Supreme Court noted that one example of a statutory “process” is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr*, 450 U.S. at 183, 209 USPQ at 6). In *Alappat*, the Court held that “*data, transformed by a machine*” “*to produce a smooth waveform display*” “*constituted a practical application of an abstract idea.*” *State Street*, 149 F.3d at 1373. In *Arrhythmia*, the Court held “*the transformation of electrocardiograph signals*” “*by a machine*” “*constituted a practical application of an abstract idea.*” *Id.* Likewise, in *State Street*, the Court held that “*the transformation of data*” “*by a machine*” “*into a final share price, constitutes a practical application of a mathematical algorithm.*” *Id.* Thus, while *Diehr* involved the transformation of a tangible object – curing synthetic rubber – the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008) generally follows these prior decisions and states that the data transformed by a process must represent an object or substance that physically exists.

Error #5) Is a failure to acknowledge that the rejected claims meet the statutory requirements for patentability. The rejected independent claim describes a process that transform data representative of an organization that physically exists into a different state or thing: a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of recommended changes in operation. The model has utility in organization analysis, modeling and management and the lists of changes have utility in improving financial performance. This error affects claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32.

Error #6) Is a failure to acknowledge the fact that the claim rejections are based on apparent misrepresentations regarding the teachings of the instant application. These apparent misrepresentations may be a product of the fact that the Examiner does not appear to have the requisite level of skill in the relevant arts. Affects all claims.

Errors 7 and 8 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of USPTO findings are the standards set forth in

the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #7) Failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 6 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the non statutory subject matter rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 and that as a result the rejections fail to meet the substantial evidence standard. Affects all rejected claims

Error #8) Failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the non statutory subject matter rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) no rational underpinning has been provided to support the legal conclusion of non statutory subject matter (see errors 1 through 4). In particular, there is no rational connection between the transformations completed by the claimed inventions and the conclusory statement that no transformations are being completed,
- b) there is no rational connection between the statutory requirements for statutory subject matter, the agency fact findings and the claim rejections (see errors 5 and 6),
- c) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,085,
- d) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,095,
- e) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,092,918 (see Evidence Appendix, page 57),
- f) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,523,047 (see Evidence Appendix, page 57), and
- g) prior agency fact-findings have shown that 35 U.S.C. 101 requirements for statutory subject matter are apparently not always applied during the prosecution and allowance of patent applications (i.e. U.S. Patent 7,536,332). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on eight errors in

the facts and the law. When the eight errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 2 is sixty four (64). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of non statutory subject matter cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case of non-statutory subject matter for a single claim.

Issue 3 – Whether the invention described in claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 represent patentable subject matter under 35 USC 101?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of non statutory subject matter for every rejected claim as detailed below.

Errors 1 and 2 - It is well established that *“the burden is on the U.S.P.T.O. to set forth a prima facie case of unpatentability. Therefore if U.S.P.T.O. personnel determine that it is more likely than not that the claimed subject matter falls outside all of the statutory categories, they must provide an explanation.* (See, e.g., *In re Nuitjen*, Docket no. 2006-1371 (Fed. Cir. Sept. 20, 2007)(slip. Op. at 18)). Errors in the claim rejections caused by the apparent failure to establish a *prima facie* case of non statutory subject matter include:

Error #1) The rejection of independent claim 57 is based on a conclusory statement that the invention described in the claim does not include a transformation. The remaining claims are rejected because they depend on the rejected independent claim. In rejecting the claim, the Examiner failed to explain:

- a) why the transformation of data representative of an organization into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value is not considered a transformation, and/or
- b) why the transformation of data into one or more lists of changes that will optimize one or more aspects of an organization financial performance is not considered a transformation.

An explanation in this regard is particularly important given the fact that the Supreme Court and the CAFC (see *Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (2008)) have both found the transformation of data regarding real world activities and/or objects into a different state or thing to be statutory subject matter. The failure to provide an explanation supported by evidence leads to the inevitable conclusion that the Examiner has failed to establish a *prima facie* case

that would support a §101 rejection of claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62.

Error #2) The rejection of the listed claims is based on a conclusory statement that the invention described in independent claim does not include a transformation. In rejecting the claim, the Examiner failed to explain why a transformation is required as all the rejected claims are for articles of manufacture and the only known precedential cases that require a transformation relates to process claims. The failure to provide an explanation as to why a transformation is required leads to the inevitable conclusion that the Examiner has failed to establish a prima facie case that would support a §101 rejection of claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62.

In short, the prima facie case of non statutory subject matter has not been properly established for any of the rejected claims.

Errors 3 and 4 – Additional errors in the rejections for non-statutory subject matter are the result of the fact that the claim rejections are based on at least one conclusory statement that is demonstrably false. Errors in the claim rejections caused by a reliance on apparently false conclusory statements include:

Error #3) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claims does not include any transformations. The claim rejections are in error because this conclusory statement is demonstrably false. The claimed invention transforms organization data into data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value. This error affects claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62.

Error #4) As discussed under errors 1 and 2 of this Issue, the rejection of the listed claims is based on a conclusory statement that the invention described in independent claims does not include any transformations. The claim rejections are in error because this conclusory statement is demonstrably false. The claimed invention transforms organization data into one or more lists of changes that will optimize one or more aspects of an organization financial performance. This error affects claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62.

The claim rejections are improper because they are based on conclusory statements that are incorrect.

Errors 5 and 6 – The claim rejections are based on 35 U.S.C. §101 which states: *Whoever*

invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title. Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for claim rejection include:

Error #5) Is a failure to acknowledge that the rejected claims meet the statutory requirements for patentability and that there is no requirement for a transformation. The rejected independent claim describes articles of manufacture that develop a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of recommended changes in operation. The model has utility in organization analysis, modeling and management and the lists of changes have utility in improving financial performance. This error affects claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62.

Error #6) Failure to acknowledge the fact that the claim rejections are based on apparent misrepresentations regarding the teachings of the instant application. These apparent misrepresentations may be a product of the fact that the Examiner does not appear to have the requisite level of skill in the relevant arts (see Evidence Appendix, pages 45 through 56). Affects all claims.

Errors 7 and 8 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of USPTO findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #7) Failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 6 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the non statutory subject matter rejection of claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 and that as a result the claim rejections fail to meet the substantial evidence standard.

Error #8) Failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the non statutory subject matter rejection of claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) no rational underpinning has been provided to support the legal conclusion of non statutory subject matter (see errors 1 through 4). In particular, there is no rational connection between the transformations completed by the claimed inventions and the conclusory statement that no transformations are being completed,
- b) there is no rational connection between the statutory requirements for statutory subject matter, the agency fact findings and the claim rejections (see errors 5 and 6),
- c) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,085,
- d) there is no rational connection between the claim rejections under this Issue and the prior agency fact findings regarding U.S. Patent 7,552,095,
- e) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,523,047 (see Evidence Appendix, page 57),
- f) there is no rational connection between the claim rejections and the prior agency fact findings regarding U.S. Patent 7,240,109 (see Evidence Appendix, page 57), and
- g) prior agency fact-findings have shown that 35 U.S.C. 101 requirements for statutory subject matter are apparently not always applied during the prosecution and allowance of patent applications (U.S. Patent 7,536,332). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on eight errors in the facts and the law. When the eight errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 3 is forty eight (48). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of non statutory subject matter cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case of non-statutory subject matter for a single claim.

Issue 4 - Whether claim 62 is enabled under 35 USC 112, first paragraph?

The claim is patentable because the claim rejection is based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of a lack of enablement for the rejected claim as detailed below.

Errors 1 through 4 - It is well established that "*a description as filed is presumed to be adequate; unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner*

to rebut the presumption. See, e.g., *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *Wertheim*, 541 F.2d at 263, 191 USPQ at 97. In rejecting a claim, the examiner must set forth express findings of fact regarding the above analysis which support the lack of written description conclusion. These findings should: (A) Identify the claim limitation at issue; and (B) Establish a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. A general allegation of "unpredictability in the art" is not a sufficient reason to support a rejection for lack of adequate written description." Furthermore, it is well established that "the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." *United States v. Telelectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988). This has been the primary test of enablement since 1916 (see *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916)). The determination that "undue experimentation" would have been needed to make and use the claimed invention is not a single, simple factual determination (*In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988)). Factors which need to be considered include: the nature of the invention, the state of the prior art, the predictability or lack thereof in the art, the amount of direction or guidance present, the presence or absence of working examples, the breadth of the claims, the relative skill of those in the art and the quantity of experimentation needed (hereinafter referred to as the Wands factors). A conclusion of lack of enablement means that, based on the evidence regarding each of the above factors (the Wands factors), the specification, at the time the application was filed, would not have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation (*In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993)). Errors in the claim rejections caused by the apparent failure to establish a *prima facie* case of a lack of enablement include:

Error #1 – Is a failure to acknowledge that no evidence has been presented. As noted above, rejection under §112 first paragraph requires a preponderance of evidence and express findings of fact. In spite of this well known requirement, no facts have been identified and no evidence has been presented that: excessive experimentation would be required and/or the full scope of the claimed invention has not been described. Affects claim 62 (#1).

Error #2) - Is a failure to acknowledge that the Wands factors have not been considered. As noted above, rejection under §112 first paragraph requires a consideration of the Wands factors. In spite of this well known requirement, the Examiner has not completed a single aspect of the required Wands factor analysis. Affects claim 62 (#2).

Error #3) - Is a failure to acknowledge that *"there is no requirement that the words in the claim must match those used in the specification disclosure,"*...MPEP §2173.02 states: *"Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire"* (see *In re Robert Skvorecz*, CAFC 2008-1221) and the related failure to acknowledge that the use of the term intelligent agent does not represent new matter. Affects claim 62 (#3).

Error #4) - Is a failure to acknowledge that all the terms rejected claim 62 (#4) have well recognized meanings which allows the reader to infer the meaning of the entire phrase with reasonable confidence (see *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004)). In particular, the meaning of the term "intelligent agent" is well known to be the same as that used to define the term "bot" in the specification (the Examiner has acknowledged that bot was defined). Furthermore, the term bot is used interchangeably with the term "intelligent agent" by those of average skill in the relevant arts (see Evidence Appendix, pages 58 through 60).

Errors 5 and 6 – The claim rejections are based on 35 U.S.C. §112 first paragraph which states: *The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.* Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for an enablement rejection include:

Error #5) Failure to acknowledge the fact that the specification meets the requirements of 35 U.S.C. §112 first paragraph. As illustrated by the preceding discussion of errors 1 through 4, the enablement rejection appears to be based of a non-existent standard for written description enablement. Affects claim 62 (#5).

Error #6) Failure to acknowledge the fact that the claim rejections have been authored by individuals who appear to lack the level of skill in the art required to author such rejections. It is well established that the *"hypothetical 'person having ordinary skill in the art' to which the*

claimed subject matter pertains would, of necessity have the capability of understanding the scientific and engineering principles applicable to the pertinent art” Ex parte Hiyamizu, 10 USPQ2d 1393, 1394 (Bd. Pat. App. & Inter. 1988). It is unlikely that anyone who understood the scientific and engineering principles applicable to the pertinent art would ever suggest that bots were somehow different than intelligent agents. Affects claim 62 (#6). This claim rejection adds to the evidence that the Examiner appears to lack the requisite level of skill in the relevant arts.

Errors 7 and 8 – In Dickinson v. Zurko, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings are the standards set forth in the Administrative Procedure Act (“APA”) at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #7) Failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 6 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the lack of enablement rejections of all rejected claims and that as a result the rejections fail to meet the substantial evidence standard.

Error #8) Failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the enablement rejection of claim 62 also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) as detailed above under errors 1 through 4, there is no evidence to support the rejection of the claim;
- b) there is no rational connection between the statutory requirements for enablement, the agency fact findings and the rejection of the claims (see errors 5 and 6), and
- c) prior agency fact-findings have shown that 35 U.S.C. 112 requirements are apparently not always considered during the prosecution and allowance of large company patent applications (i.e. U.S. Patent 7,395,236). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on eight errors in the facts and the law. Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of a lack of enablement cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case of a lack of enablement for a single claim.

Issue 5 – Whether claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 are indefinite under 35 USC 112, second paragraph?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of claim indefiniteness for every rejected claim as detailed below.

Errors 1 through 5 – It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent.* See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also *In re Larsen*, No. 01-1092 (Fed. Cir. May 9, 2001). Errors in the rejections for claim indefiniteness include:

Error #1 – Is a failure to acknowledge that no evidence has been provided to indicate that rejected claims do not *particularly point out or distinctly claim the disclosed invention to someone of average skill in the art*. In particular, all the claim rejections for indefiniteness are all based on conclusory statements. Affects all claims.

Error #2 - Is a failure to acknowledge that “*there is no requirement that the words in the claim must match those used in the specification disclosure*,” and “*Obviously, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite.*” MPEP §2173.02 states: “*Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire.*” (see *In re Robert Skvorecz*, CAFC 2008-1221). Affects all claims.

Error #3 - Is a failure to acknowledge that most of the terms used in the rejected claims have well recognized meanings which allows the reader to infer the meaning of the entire claim with reasonable confidence (see *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004)). Affects all claims.

Error #4) - Is a failure to acknowledge that the rejected claims do not contain any terms that do not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable (Halliburton Energy Services, Inc. v. M-I LLC, 514 F.3d 1244, 1255, 85 USPQ2d 1663 (Fed. Cir. 2008) and Halliburton, 514 F.3d at 1246, 85 USPQ2d at 1658 (Citing Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 950 (Fed. Cir. 2007). In particular:

- a) the conclusory statement "the meaning of transforming at least a portion of the data into a model in claim 57 is unclear" is incorrect. The specification fully explains the portion of data used and the process of transforming that data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value (see the Summary of Claimed Subject Matter for claim 57 for the specific portion of the specification and drawings), and
- b) the conclusory statement that "the relationship between the model and the list of changes in claim 57 is unclear" is incorrect. The specification clearly explains that the lists of changes are developed using information obtained from the model (see the Summary of Claimed Subject Matter for claim 57 for the specific portion of the specification and drawings).

The well documented process contained in the specification highlights the relevant principles and provides an objective standard for determining the scope of the claimed invention (see Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1356. (Fed. Cir. 2005). Error 4 adds to the substantial evidence that the Examiner appears to lack the requisite skill in the relevant arts to author a valid written description rejection. Affects all claims.

Error #5) – Is a failure to acknowledge that the Examiner has failed to establish a *prima facie* case of indefiniteness by failing to consider the rejected claims as a whole. The claim rejections all rely on conclusory statements regarding a portion of a claim. The complete claims each provide additional context that helps define the metes and bounds of the claimed invention. Affects all claims.

Errors 6 through 8 – The claim rejections are based on 35 U.S.C. §112 second paragraph which states: *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.* Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for claim rejections for indefiniteness include:

Error #6) Is a failure to acknowledge the fact that the rejected claims meet the requirements of 35 U.S.C. §112 second paragraph. As illustrated by the preceding discussion of errors 1

through 5, the rejections for claim indefiniteness appear to be based on an unknown and non-existent standard for claim definiteness. Affects all claims.

Error #7) Is a failure to acknowledge the fact that, as discussed previously, the claim rejections have been authored and/or approved by individuals who appear to lack the level of skill in the art required to author valid claim rejections for written description. It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of ... The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.* Evidence that the claim rejections have been authored and/or approved by individuals who appear to lack the required level of skill in the art includes:

- 1) the Examiner who authored the instant Office Action has approved the allowance and issue of a number of patents for "inventions" that combine demand elasticity curves, well known to those of average skill in the art for almost 200 years, activity based costing, well known to those of average skill in the art for over 20 years, and profit optimization similar to that taught by Eder in U.S. Patent 5,615,109,
- 2) in the Office Action for 10/097,344 the Examiner who authored the instant Office Action has equated the analysis of risk using asset betas with the analysis of risk from obsolescence and demand variability. It has been well known to those of average skill in the art for over 50 years that beta does not measure risks that can theoretically be diversified away by investors - such as obsolescence risk and demand variability risk,
- 3) Issue 4 of this Appeal Brief,
- 4) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated the evaluation of contracts to sell or purchase bonds at a specific date (aka options) with the evaluation of options to develop new sources of revenue (aka growth options),
- 5) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner has equated the use of analytical models to determine discount rates based on similarity with the use of the iterative discount rate back fitting to match a known portfolio value,
- 6) Error 4 of this issue,
- 7) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated the use of pre-specified models with the use of models developed by learning from the data,
- 8) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated valuation based solely on cash flow with valuation that includes cash flow value, real option value and market sentiment value,

- 9) in the Office Action for 10/097,344 the Examiner who authored the instant Office Action stated that value analysis based on an efficient market hypothesis is pertinent to value analysis for elements of value that have no market, and
- 10) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated a model of actual values with a statistical model.

Error #8) – Is a failure to acknowledge that the alleged indefiniteness of the claims may be a product of the Examiner's apparent lack of understanding of the relevant rules and statutes. The instant application incorporated a number of applications by reference. In accordance with 37 CFR 1.57, the proper response to the identification of an allegedly unsupported claim limitation would be to first require that pertinent material from the cross referenced patent applications be added to the specification instead of issuing an arbitrary and capricious rejection for indefiniteness. In accordance with 37 CFR 1.57 any such material (if identified) would be considered incorporated by reference. Affects all claims.

Errors 9 and 10 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #9) Is a failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 8 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the rejections for indefiniteness for claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 and that as a result the rejections fail to meet the substantial evidence standard.

Error #10) Is a failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the rejection of claim 57, claim 58, claim 59, claim 60, claim 61 and claim 62 for indefiniteness also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) as detailed above under errors 1 through 5, there is no evidence that the claims are indefinite;
- b) as detailed under errors 6 through 8, there is no rational connection between the statutory requirements for claim definiteness, the agency fact findings and the rejection of the claims,

c) prior agency fact-findings have shown that 35 U.S.C. 112 requirements are apparently not always considered during the prosecution and allowance of large company patent applications (i.e. U.S. Patent 7,395,236). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on ten errors in the facts and the law. When the ten errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 5 is sixty (60). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of indefiniteness cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case that a single claim is indefinite.

Issue 6 – Whether claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 are indefinite under 35 USC 112, second paragraph?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of claim indefiniteness for every rejected claim as detailed below.

Errors 1 through 5 – It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent.* See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also *In re Larsen*, No. 01-1092 (Fed. Cir. May 9, 2001). Errors in the claim rejections for claim indefiniteness include:

Error #1) – Is a failure to acknowledge that no evidence has been provided to indicate that rejected claims do not *particularly point out or distinctly claim the disclosed invention to someone of average skill in the art*. In particular, all the claim rejections for indefiniteness are all based on conclusory statements. Affects all claims.

Error #2) - Is a failure to acknowledge that “*there is no requirement that the words in the claim must match those used in the specification disclosure,*” and “*Obviously, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite.*” MPEP §2173.02 states: “*Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire.*” (see *In re Robert Skvorecz*, CAFC 2008-1221). Affects all claims.

Error #3) - Is a failure to acknowledge that virtually all of the terms used in the rejected claims have well recognized meanings which allows the reader to infer the meaning of the entire claim with reasonable confidence (see *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004)). Affects all claims.

Error #4) - Is a failure to acknowledge that the rejected claims do not contain any terms that do not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable (*Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1255,85 USPQ2d 1663 (Fed. Cir. 2008) and *Halliburton*, 514 F.3d at 1246, 85 USPQ2d at 1658 (Citing *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007)). In particular:

- a) the conclusory statement “the meaning of transforming at least a portion of the data into a model in claim 49 is unclear” is incorrect. The specification fully explains the portion of data used and the process of transforming that data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value (see the Summary of Claimed Subject Matter for claim 49 for the specific portion of the specification and drawings), and
- b) the conclusory statement that “the relationship between the model and the list of changes in claim 49 is unclear” is incorrect. The specification clearly explains that the lists of changes are developed using information obtained from the model (see the Summary of Claimed Subject Matter for claim 49 for the specific portion of the specification and drawings).

The well documented process contained in the specification highlights the relevant principles and provides an objective standard for determining the scope of the claimed invention (see *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1356. (Fed. Cir. 2005)). Error 4 adds to the substantial evidence that the Examiner appears to lack the requisite skill in the relevant arts to author a valid written description rejection. Affects all claims.

Error #5) – Is a failure to acknowledge that the Examiner has failed to establish a *prima facie* case of indefiniteness by failing to consider the rejected claims as a whole. The claim rejections

all rely on conclusory statements regarding a portion of a claim. The complete claims each provide additional context that helps define the metes and bounds of the claimed invention. Affects all claims.

Errors 6 through 8 – The claim rejections are based on 35 U.S.C. §112 second paragraph which states: *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.* Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for claim rejections for indefiniteness include:

Error #6) Is a failure to acknowledge the fact that the rejected claims meet the requirements of 35 U.S.C. §112 second paragraph. As illustrated by the preceding discussion of errors 1 through 5, the rejections for claim indefiniteness appear to be based on an unknown and non-existent standard for claim definiteness. Affects all claims.

Error #7) Is a failure to acknowledge the fact that, as discussed previously, the claim rejections have been authored and/or approved by individuals who appear to lack the level of skill in the art required to author valid claim rejections for written description. It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of ... The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.* Evidence that the claim rejections have been authored and/or approved by individuals who appear to lack the required level of skill in the art includes:

1) the Examiner who authored the instant Office Action has approved the allowance and issue of a number of patents for “inventions” that combine demand elasticity curves, well known to those of average skill in the art for almost 200 years, activity based costing, well known to those of average skill in the art for over 20 years, and profit optimization similar to that taught by Eder in U.S. Patent 5,615,109,

2) in the Office Action for 10/097,344 the Examiner who authored the instant Office Action has equated the analysis of risk using asset betas with the analysis of risk from obsolescence and demand variability. It has been well known to those of average skill in the art for over 50 years that beta does not measure risks that can theoretically be diversified away by investors - such as obsolescence risk and demand variability risk,

3) Issue 4 of this Appeal Brief,

4) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated the evaluation of contracts to sell or purchase bonds at a specific date (aka options) with the evaluation of options to develop new

sources of revenue (aka growth options),

5) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner has equated the use of analytical models to determine discount rates based on similarity with the use of the iterative discount rate back fitting to match a known portfolio value,

6) Error 4 of this issue,

7) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated the use of pre-specified models with the use of models developed by learning from the data,

8) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated valuation based solely on cash flow with valuation that includes cash flow value, real option value and market sentiment value,

9) in the Office Action for 10/097,344 the Examiner who authored the instant Office Action stated that value analysis based on an efficient market hypothesis is pertinent to value analysis for elements of value that have no market, and

10) in the Office Action for 10/097,344 (see Evidence Appendix, pages 45 – 56) the Examiner who authored the instant Office Action has equated value analysis based on an efficient market hypothesis with value analysis that explicitly assumes markets are not efficient.

Error #8) – Is a failure to acknowledge that the alleged indefiniteness of the claims may be a product of the Examiner's apparent lack of understanding of the relevant rules and statutes. The instant application incorporated a number of applications by reference. In accordance with 37 CFR 1.57, the proper response to the identification of an allegedly unsupported claim limitation would be to first require that pertinent material from the cross referenced patent applications be added to the specification instead of issuing an arbitrary and capricious rejection for indefiniteness. In accordance with 37 CFR 1.57 any such material (if identified) would be considered incorporated by reference. Affects all claims.

Errors 9 and 10 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #9) Is a failure to acknowledge the fact that the claim rejections fail under the substantial

evidence standard. Errors 1 through 8 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the rejections for indefiniteness for claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 and that as a result the rejections fail to meet the substantial evidence standard.

Error #10) Is a failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the rejection of claim 49, claim 50, claim 52, claim 53, claim 54, claim 55 and claim 56 for indefiniteness also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) as detailed above under errors 1 through 5, there is no evidence that the claims are indefinite;
- b) as detailed under errors 6 through 8, there is no rational connection between the statutory requirements for claim definiteness, the agency fact findings and the rejection of the claims,
- c) prior agency fact-findings have shown that 35 U.S.C. 112 requirements are apparently not always considered during the prosecution and allowance of large company patent applications (i.e. U.S. Patent 7,395,236). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on ten errors in the facts and the law. When the ten errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 6 is seventy (70). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of indefiniteness cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case that a single claim is indefinite.

Issue 7 - Whether claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 are indefinite under 35 USC 112, second paragraph?

The claims are patentable because the claim rejections are based on a number of errors in the facts and in the law. Because of these errors, the arguments presented by the Examiner fail to establish a *prima facie* case of claim indefiniteness for every rejected claim as detailed below.

Errors 1 through 5 – It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. In*

reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also *In re Larsen*, No. 01-1092 (Fed. Cir. May 9, 2001). Errors in the claim rejections for claim indefiniteness include:

Error #1) – Is a failure to acknowledge that no evidence has been provided to indicate that rejected claims do not *particularly point out or distinctly claim the disclosed invention to someone of average skill in the art*. In particular, all the claim rejections for indefiniteness are all based on conclusory statements. Affects all claims.

Error #2) - Is a failure to acknowledge that “*there is no requirement that the words in the claim must match those used in the specification disclosure*,” and “*Obviously, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite*.” MPEP §2173.02 states: “*Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire*.” (see *In re Robert Skvorecz*, CAFC 2008-1221). Affects all claims.

Error #3) - Is a failure to acknowledge that virtually all of the terms used in the rejected claims have well recognized meanings which allows the reader to infer the meaning of the entire claim with reasonable confidence (see *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004)). In particular, the plain meaning of the terms used in claim 25 make it clear that both the data format and type of organization are modified by the phrase “where the organization has one or more enterprises”. The specification also provides information that allows someone of average skill in the art to ascertain the meaning (i.e. see Table 1 and Table 16 of the specification) if they are unclear. In a similar manner, the well known meaning of the word “category” implies that there is more than one category of value. Given this fact, the use of a Markush group in claim 25 with a plurality of categories of value should not create any confusion regarding the scope of the claimed invention. Affects all claims.

Error #4) - Is a failure to acknowledge that the rejected claims do not contain any terms that do not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable (*Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1255, 85 USPQ2d 1663 (Fed. Cir. 2008) and *Halliburton*, 514 F.3d at 1246, 85

USPQ2d at 1658 (Citing Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 950 (Fed. Cir, 2007). In particular:

- a) the conclusory statement "the meaning of transforming at least a portion of the data into a model in claim 25 is unclear" is incorrect. The specification fully explains the portion of data used and the process of transforming that data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value (see the Summary of Claimed Subject Matter for claim 25 for the specific portion of the specification and drawings),
- b) the conclusory statements about the dependent claims under this issue are also incorrect. For example, it is reasonably ascertainable that the "contribution" and/or "net contribution" in claims 27, 29 and 30 is the "tangible net contribution" of claim 25. In a similar manner, it is also reasonably ascertainable that model that is being referenced in claim 27 and 32 is the "model" of claim 25 that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value is being referenced and that "an element of value" in claim 26 corresponds to the "one or more elements of value" in claim 25. Finally it should be noted that it is reasonably ascertainable that the "aspect of financial performance" in claim 28 corresponds to "one or more aspects of an organization financial performance" in claim 25 and that "an organization system database" in claim 31 corresponds to one of the "plurality of organization system databases" in claim 25 (please note that the Appellant would not object to an Examiner's amendment changing the associated "a" or "an" to "the" in the listed dependent claims as this appears to be the only formality barring allowance and issue).
- c) the conclusory statement that "the relationship between the model and the list of changes in claim 25 is unclear" is incorrect. The specification clearly explains that the lists of changes are developed using information obtained from the model (see the Summary of Claimed Subject Matter for claim 25 for the specific portion of the specification and drawings).

The well documented process contained in the specification provides an objective standard for determining the scope of the claimed invention (see Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1356. (Fed. Cir. 2005). Error 4 also adds to the substantial evidence that the Examiner appears to lack the requisite skill in the relevant arts to author a valid written description rejection. Affects all claims.

Error #5) – Is a failure to acknowledge that the Examiner has failed to establish a *prima facie* case of indefiniteness by failing to consider the rejected claims as a whole. The claim rejections all rely on conclusory statements regarding a portion of a claim. The complete claims each

provide additional context that helps define the metes and bounds of the claimed invention.

Affects all claims.

Errors 6 through 8 – The claim rejections are based on 35 U.S.C. §112 second paragraph which states: *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.* Errors in the claim rejections caused by the apparent failure to meet any of the statutory requirements for claim rejections for indefiniteness include:

Error #6) Is a failure to acknowledge the fact that the rejected claims meet the requirements of 35 U.S.C. §112 second paragraph. As illustrated by the preceding discussion of errors 1 through 5, the rejections for claim indefiniteness appear to be based on an unknown and non-existent standard for claim definiteness. Affects all claims.

Error #7) Is a failure to acknowledge the fact that, as discussed previously, the claim rejections have been authored and/or approved by individuals who appear to lack the level of skill in the art required to author valid claim rejections for written description. It is well established that: *the definiteness of claim language must be analyzed, not in a vacuum, but in light of ... The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.* Evidence that the claim rejections have been authored and/or approved by individuals who appear to lack the required level of skill in the art includes the evidence identified previously under Issue 6, Error #7.

Error #8) – Is a failure to acknowledge that the alleged indefiniteness of the claims may be a product of the Examiner's apparent lack of understanding of the relevant rules and statutes. The instant application incorporated a number of applications by reference. In accordance with 37 CFR 1.57, the proper response to the identification of an allegedly unsupported claim limitation would be to first require that pertinent material from the cross referenced patent applications be added to the specification instead of issuing an arbitrary and capricious rejection for indefiniteness. In accordance with 37 CFR 1.57 any such material (if identified) would be considered incorporated by reference. Affects all claims.

Errors 9 and 10 – In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. Errors in the claim rejections caused by the apparent failure to meet any of the requirements of the APA include:

Error #9) Is a failure to acknowledge the fact that the claim rejections fail under the substantial evidence standard. Errors 1 through 8 clearly show that the relevant Office Action fails to provide even a scintilla of evidence to support the rejections for indefiniteness for claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 and that as a result the rejections fail to meet the substantial evidence standard.

Error #10) Is a failure to acknowledge the fact that the claim rejections fail under the arbitrary and capricious standard. The Appellant respectfully submits that the rejection of claim 25, claim 26, claim 27, claim 28, claim 29, claim 30, claim 31 and claim 32 for indefiniteness also fails to pass the arbitrary and capricious test for a number of reasons including the fact that:

- a) as detailed above under errors 1 through 5, there is no evidence that the claims are indefinite;
- b) as detailed under errors 6 through 8, there is no rational connection between the statutory requirements for claim definiteness, the agency fact findings and the rejection of the claims,
- c) prior agency fact-findings have shown that 35 U.S.C. 112 requirements are apparently not always considered during the prosecution and allowance of large company patent applications (i.e. U.S. Patent 7,395,236). This apparently unequal application of the law comprises an arbitrary and capricious violation of 35 USC 3.

As detailed above, the Examiner has based the claim rejections under this issue on ten errors in the facts and the law. When the ten errors are multiplied by the number of claim rejections affected by each error, the total number of errors associated with the rejection of claims under Issue 7 is eighty (80). Because of these errors, the claim rejections do not meet either standard of the APA and the *prima facie* case of indefiniteness cannot be properly established.

Summarizing the preceding discussion, the Appellant respectfully submits that the Examiner has failed to produce the evidence required to satisfy the requirements of the APA and/or establish a *prima facie* case that a single claim is indefinite.

Errata

The appellant discovered a typo during the preparation of this Appeal Brief on line 5 of page 72 of the specification where "Table 40" should read "Table 43".

8. Conclusion

The Appellant notes that with respect to the prosecution of the instant application, it appears that the U.S.P.T.O. has not fully complied with the requirements set forth in the APA, 35 U.S.C. 3 and 35 U.S.C. 131. A valid patent application rejection requires substantial evidence (Gartside, 203 F.3d at 1312). As described in the preceding section, the April 29, 2009 Office Action does not contain any evidence that would support the rejection of a single claim. However, related appeals and the March 5, 2009 Office Action for the instant application do provide substantial evidence that: those authoring/signing the Office Action do not appear to understand any of the scientific and/or engineering principles applicable to the pertinent art, those authoring the Office Action do not adhere to any of the well established statutory requirements for authoring valid claim rejections, and that those authoring the Office Action appear to have based the claim rejections on the application legal standards that are not applied during the review and allowance of similar applications filed by larger companies.

For the reasons detailed above, the Appellant respectfully but forcefully contends that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,
Asset Trust, Inc.

/B.J. Bennett/

B.J. Bennett, President
Dated: December 27, 2009

9. Claims Appendix

25. A computer implemented finance method, comprising:

obtaining data representative of an organization from a plurality of organization system databases in a format suitable for processing where the organization has one or more enterprises; and

transforming at least a portion of the data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes that will optimize one or more aspects of an organization financial performance, and

using the model to analyze the data and output said tangible net contributions

where the categories of value are current operation and a category of value selected from the group consisting of real options, market sentiment and combinations thereof, and

where one or more lists of changes that will optimize one or more aspects of organization financial performance comprise one or more lists of a change to one or more price premiums or to one or more other value drivers.

26. The method of claim 25 where an element of value is selected from the group consisting of alliances, brands, channels, customers, employees, equipment intellectual property, partnerships, processes, supply chains, vendors, and combinations thereof.

27. The method of claim 25 where developing a model that identifies a net contribution of one or more elements of value to an organization value by a category of value further comprises:

creating performance indicators for each element of value using at least a portion of the data, training models of historical and forecast data for one or more aspects of financial performance using said indicators to identify value driver candidates by element of value by enterprise, analyzing historical and forecast data for one or more aspects of financial performance using induction algorithms and said value driver candidates to identify value drivers and create element impact summaries by enterprise, and

using said element impact summaries to quantify a contribution of each of one or more elements of value to an organization value by category of value by enterprise.

28. The method of claim 27, where an aspect of financial performance is selected from the group consisting of revenue, expense, capital change, market value, alliance value, brand value, channel value, customer value, customer relationship value, employee value, employee relationship value,

intellectual property value, partnership value, process value, supply chain value, vendor value, vendor relationship value and combinations thereof.

29. The method of claim 25 where a contribution of an element of value to a category of value is a net contribution of the element of value to the category of value and the other elements of value.

30. The method of claim 25 that further comprises using a model that identifies a net contribution of one or more elements of value to an organization value by a category of value to complete activities selected from the group consisting of identifying changes to one or more element value drivers that will optimize one or more aspects of organization financial performance, identifying the impact of value driver changes on one or more aspects of organization financial performance in an interactive manner, reporting organization market and share price value by element of value, reporting organization market and share price value by category of value, identifying a price point for trading organization shares and combinations thereof.

31. The method of claim 25 where an organization system database is selected from the group consisting of advanced financial system databases, basic financial system databases, alliance management system databases, brand management system databases, business intelligence system databases, customer relationship management system databases, channel management system databases, estimating system databases, intellectual property management system databases, process management system databases, supply chain management system databases, vendor management system databases, operation management system databases, enterprise resource planning systems (ERP), material requirement planning systems (MRP), quality control system databases, sales management system databases, human resource system databases, accounts receivable system databases, accounts payable system databases, capital asset system databases, inventory system databases, invoicing system databases, payroll system databases, purchasing system databases, web site system databases, the Internet, external databases, user input and combinations thereof.

32. The method of claim 25 where a model that identifies a tangible net contribution of one or more elements of value to an organization value by a category of value also identifies a tangible net contribution of one or more sub-elements of value to an organization value by a category of value.

49. A computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a composite application method for data processing, comprising:

using two or more independent components of application software to obtain data representative of an organization from a plurality of organization system databases in a format suitable for processing where the organization has one or more enterprises and transform at least a portion of the data into a model that identifies and outputs: a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes to one or more value drivers that will optimize one or more categories of value and produce one or more additional useful results by analyzing the set of data representative of the organization using one or more predictive models that rely on a set of input data that have been transformed into a different state or thing.

50. The computer readable medium of claim 49, wherein two or more independent components of application software can be flexibly combined as required to support the development of one or more useful results.

52. The computer readable medium of claim 49, wherein an independent component of application software completes processing selected from the group consisting of: data analysis, attribute derivation, capitalization, causal analysis, classification, clustering, count linkages, data acquisition, data conversion, data storage, data transformation, element life estimation, indicator selection, induction, keyword counting, keyword search, linkage location, relative strength determination, statistical learning, valuation, vector generation and combinations thereof.

53. The computer readable medium of claim 49, wherein one or more useful results are selected from the group consisting of: an element contribution determination, an element impact quantification, an element valuation, an enterprise financial performance analysis, an enterprise financial performance optimization, a keyword location identification, an enterprise financial performance simulation, a future market value optimization, a future market value quantification, a management report production, a real option discount rate calculation, a real option valuation, a share price valuation, an element of value segmentation, a target share price determination, a keyword count and combinations thereof.

54. The computer readable medium of claim 49, wherein one or more value drivers comprise a

price premium for each of one or more organization offerings.

55. The computer readable medium of claim 49, wherein a plurality of data are integrated from two or more systems in accordance with xml and a common schema using metadata mapping.

56. The computer readable medium of claim 49, wherein two or more independent components of application software further comprise two or more bots or intelligent agents.

57. A computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a data method, comprising:

converting, integrating and storing data representative of one or more physical entities or substances from a plurality of disparate sources as required to transform said data into an integrated database using xml and a common schema, and

transforming at least a portion of the data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value and one or more lists of changes to one or more value drivers that will optimize one or more categories of value by using the integrated database as a sole source for organization related data

where the plurality of disparate sources further comprise data sources selected from the group consisting of a plurality of database management systems, one or more external databases, an Internet and combinations thereof,

where xml comprises a common metadata standard, and

where the schema incorporates a common data dictionary.

58. The computer readable medium of claim 57, wherein one or more value drivers comprise a price premium for each of one or more organization offerings.

59. The computer readable medium of claim 57, wherein a plurality of disparate sources are selected from the group consisting of accounts receivable systems, accounts payable systems, advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, capital asset

systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site management systems and combinations thereof.

60. The computer readable medium of claim 57, wherein the method further comprises:
obtaining one or more keywords and a set of classification rules for each keyword from a user,
performing an Internet search for the one or more keywords and making a set of location and count results from said search available for use in processing or display after the results are classified.
61. The computer readable medium of claim 60, wherein a keyword further comprises a word selected from a category consisting of company name, brand name, trademark and combinations thereof.
62. The computer readable medium of claim 60, wherein a computer readable medium comprises an intelligent agent.

10. Evidence Appendix

Pages 45 – 56 excerpt from Office Action for 10/097,344 by Sussana Meinecke Diaz

Page 57 excerpt from Rappaport referenced submitted on filing date

Pages 58 – 60 reference submitted June 22, 2009



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|--|-------------|----------------------|--------------------------|------------------|
| 10/097,344 | 03/13/2002 | Jeff Scott Eder | | 1092 |
| 53787 | 7590 | 04/16/2009 | | |
| ASSET TRUST, INC. 2020 MALTBY ROAD SUITE 7362 BOTHELL, WA 98021 | | | EXAMINER | |
| | | | MEINECKE DIAZ, SUSANNA M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3692 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|------------------------------|------------------------|---------------------|--|
| | 10/097,344 | EDER, JEFF SCOTT | |
| | Examiner | Art Unit | |
| | Susanna M. Diaz | 3692 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 February 2009.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 42-85 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 42-85 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/23/09.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application
6) Other: ____.

dictionary that identifies attributes selected from the group consisting of components of value, growth options, elements of value, assets, dates, units of measure and combinations thereof." It is not clear what the metes and bounds of "in accordance with a common data dictionary" are. Does this limitation intend to convey that a data dictionary is utilized to map phrases to certain terms of art? If so, this should be explicitly clarified in the claim language in a manner that is fully supported by Applicant's original disclosure. Alternately, does this limitation merely refer to the fact that the listed attributes are identified using common terms of art? For examination purposes, the latter will be assumed.

Claims 52, 66, and 79 recite that "determining a best fit combination of item performance indicators and predictive model algorithms further comprises completing a tournament." The scope of this limitation is unclear. Is Applicant referring to a predictive model that is based on a tournament algorithm? Is Applicant referring to the ability to select one of various models? Is Applicant referring to the ability to execute various models sequentially? The Examiner has looked toward the originally filed specifically for clarification and none is provided.

Appropriate correction and/or clarification are required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 42-46, 48-60, 62-73, 75-82, and 85 are rejected under 35 U.S.C. 102(a, e) as being anticipated by Sandretto (U.S. Patent No. 5,812,988).

Sandretto discloses an evaluation method, comprising:

[Claim 42] preparing business data from a plurality of enterprise systems for use in processing (col. 34, lines 6-67), quantifying a contribution of each of one or more elements of value to aspects of enterprise value selected from the group consisting of a market value, a current operation value, one or more growth option values and combinations thereof using at least a portion of said data (col. 34, lines 30-67);

using at least part of said contributions to determine a value of each element of value (col. 34, lines 6-67), and

displaying the value of the aspects of enterprise value and the elements of value using a paper document or an electronic display (Fig. 1A - #7, Figs. 11-14; col. 15, lines 57-58; col. 35, line 67 through col. 36, line 2);

[Claim 43] where the preparing data for use in processing further comprises aggregating and storing business data in accordance with a common data dictionary that identifies attributes selected from the group consisting of components of value, growth options, elements of value, assets, dates, units of measure and combinations thereof (Fig. 1A, #8; col. 15, lines 23-52; col. 34, lines 30-67);

[Claim 44] wherein enterprise systems are selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases and combinations thereof (col. 15, lines 35-52 – Financial data may be received from internal or external sources; col. 34, lines 6-67 – Any segment of a company that provides financial data is at least one of an advanced financial, basic financial, estimating, or process management system);

[Claim 45] wherein elements of value are selected from the group consisting of brands, customers, employees, partnerships, vendor relationships and combinations thereof (col. 16, lines 49-53 -- A company's current sales are indicative of an element of value associated with customers);

[Claim 46] wherein quantifying an element contribution to one or more growth options further comprises developing a real option discount rate that is a function of an element of value profile (col. 8, line 52 through col. 12, line 55; col. 34, lines 6-67);

[Claim 48] wherein calculating a value for each of one or more growth options further comprises the use of a real option algorithm to complete the valuation using an option

discount rate that is a function of an element of value profile (col. 8, line 52 through col. 12, line 55; col. 34, lines 6-67);

[Claim 49] wherein quantifying an element contribution to a current operation value further comprises quantifying an element contribution to each of one or more components of value selected from the group consisting of revenue, expense, capital change and combinations thereof and summing said component of value contributions to determine a current operation value contribution (Fig. 1; col. 34, lines 6-67);

[Claim 50] where quantifying an element contribution to a component of value comprises:

identifying one or more item performance indicators for each of one or more enterprise element of values using data that has been prepared for processing (col. 8, line 52 through col. 12, line 55; col. 34, lines 6-67),

determining a best fit combination of item performance indicators and predictive model algorithms for modeling a plurality of element of value impacts on a component of value (col. 8, line 52 through col. 12, line 55; col. 34, lines 6-67),

using the best fit combination of item performance indicators and predictive model algorithms to create a best fit model (col. 15, lines 10-14; col. 20, lines 61-67; col. 32, lines 38-60 – Regression analysis utilizes best fit analysis),

deriving a weighting factor for each element of value using said best fit model (col. 15, lines 10-14; col. 20, lines 61-67; col. 32, lines 38-60 – Regression analysis utilizes best fit analysis. The betas are effectively weighting factors),

calculating a present value of the component of value (col. 32, lines 38-60); and

combining the element of value weighting factors with the present value of each component of value to calculate a contribution for each element of value to the component of value (columns 32-39);

[Claim 51] wherein a best fit model further comprises a composite variable or vector for each element of value when there is a low level of interaction between the elements of value or a sum of value driver impacts when there is a high level of interaction between the elements of value (col. 9, lines 40-55; col. 19, lines 46-62; col. 22, lines 4-26; col. 25, line 54 through col. 26, line 12; col. 30, lines 27-53 – Correlations between variables may be identified);

[Claim 52] wherein determining a best fit combination of item performance indicators and predictive model algorithms further comprises completing a tournament (columns 8-12);

[Claim 53] where a predictive model algorithm is selected from the group consisting of a neural net, a Bayesian model, a generalized additive model, a multivalent model and a regression model (col. 15, lines 10-14; col. 20, lines 61-67; col. 32, lines 38-60 – A regression model may be used);

[Claim 54] where an item performance indicator is selected from the group consisting of item variables, ratios, trends, averages, patterns, time lagged ratios, time lagged trends, time lagged averages, time lagged variables, time lagged patterns and combinations thereof (col. 8, line 52 through col. 12, line 55; col. 34, lines 6-67);

[Claim 55] wherein a best fit model further comprises a network model that supports automated analysis through computational techniques (col. 15, lines 10-14; col. 20, lines 61-67; col. 32, lines 38-60 – A regression model may be used).

[Claims 56-60, 62-69] Claims 56-60 and 62-69 recite limitations already addressed by the rejection of claims 42-46 and 48-55 above; therefore, the same rejection applies. Furthermore, Sandretto's invention is executed using software running on hardware (Fig. 1A; col. 15, lines 23-67).

[Claims 70-73, 75-82, 85] Claims 70-73, 75-82, and 85 recite limitations already addressed by the rejection of claims 42-46 and 48-55 above; therefore, the same rejection applies. Furthermore, Sandretto's invention is executed using software running on hardware (Fig. 1A; col. 15, lines 23-67).

Regarding claim 85, Sandretto discloses that a price premium for an item being sold comprises a value driver (abstract).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 47, 61, 74, 83, and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandretto (U.S. Patent No. 5,812,988), as applied to claims 46, 60, and 70 above, in view of Official Notice.

[Claims 47, 61, 74] Sandretto does not explicitly disclose that developing a real option discount rate that is a function of an element of value profile further comprises using data envelopment analysis to determine the rate. Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention to apply data envelopment analysis (DEA) to operations research and economic models. Well-known benefits of DEA include the ability to more effectively identify relationships among variables. DEA can also assist in more efficiently manipulating multiple inputs and outputs. Sandretto's models must track the relationships among multiple inputs and outputs and Sandretto's analysis is based on economic models; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Sandretto to develop a real option discount rate that is a function of an element of value profile that further comprises using data envelopment analysis to determine the rate in order to facilitate the identification of relationships among the various modeled inputs and outputs.

[Claim 83] Sandretto does not explicitly disclose means for managing a supply chain risk; however, Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention for supply chain managing companies to have their value associated with cash flows, stocks, etc. Sandretto's company valuation is based on the company's cash flow, assets, stocks, bonds, etc (col. 9, line 56 through col. 10, line 7);

therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Sandretto to include means for managing a supply chain risk in order to make Sandretto's invention more marketable in the supply chain industry. Adapting Sandretto's valuation techniques to the supply chain industry does not destroy the operability of Sandretto and it would yield predictable results.

[Claim 84] Sandretto does not explicitly disclose means for optimizing an enterprise value while giving a consideration to a risk of margin loss. However, Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention to perform value optimization taking into account a potential risk of margin loss. Knowledge of this factor helps to facilitate a more accurate understanding of possible effects on the value of a company, particularly when margin loss is a contributing factor to value. Sandretto values a company based on cash flow, stock valuation, etc. and risk of margin loss can have a great effect on stock values; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Sandretto to include means for optimizing an enterprise value while giving a consideration to a risk of margin loss in order to facilitate more accurate valuation of the company by taking into account any risk of margin loss that is associated with the company's stocks.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brilando (US 2002/0062238) – Discusses the effect of volatility of a company's share price on the company's valuation.

Kaplan, Steven N. and Richard S. Ruback. "The Valuation of Cash Flow Forecasts: An Empirical Analysis." *The Journal of Finance*, vol. 50, no. 4, pages 1059-1093, September 1995 – Discusses various valuation techniques.

Luehrman, Timothy A. "What's It Worth? A General Manager's Guide to Valuation." *Harvard Business Review*, Pages 132-142, May-June 1997 -- Discusses various valuation techniques.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susanna M. Diaz/
Primary Examiner, Art Unit 3692

EARNINGS—AN UNRELIABLE BOTTOM LINE

In Chapter 1 providing maximum return for shareholders was established as the fundamental objective of the business corporation. It was further established that shareholder return is generated by dividends and increases in share price. The issue to be addressed now is whether accounting earnings as a standard for assessing alternative strategies and measuring subsequent performance is consistent with the shareholder return objective. Stated more concretely, the issue is whether earnings can reliably measure the change in the present value of the firm.

There are several important reasons why earnings fail to measure changes in the economic value of the firm:

- Alternative accounting methods may be employed.
- Investment requirements are excluded.
- Time value of money is ignored.

Alternative Accounting Methods

The earnings number may be computed using alternative and equally acceptable accounting methods. Prominent examples are the differences that arise from last-in, first-out (LIFO) and first-in, first-out (FIFO) approaches to computing cost of sales, various methods of computing depreciation, and purchase versus pooling-of-interests accounting for mergers and acquisitions. A change in accounting method for financial reporting purposes, whether mandated by the Financial Accounting Standards Board (FASB) or simply dictated by management choice, can materially impact earnings but does not alter the company's cash flows and therefore should not affect its economic value. This assumes that the change in accounting is for financial reporting purposes and does not affect the computation of income taxes. It is, of course, also possible that an accounting change is seen as a signal for some more fundamental changes in the company's prospects. For example, a change to an income-increasing accounting method may be viewed by the market as indicating a downturn in the company earnings prospects. In such a situation the accounting change may trigger a decrease in share price. Note, however, the market value decline is not due to the accounting change *per se*, but rather due to information inferred from management's decision to make an accounting change.

The accountant's earnings figure results from attempts to match costs against revenues. This process involves allocating costs of assets,

Frequently Asked Questions

- What is a bot?
- What is an Intelligent Agent?
- What kinds of things can Intelligent Agents do?
- What do Intelligent Agents cost?
- Do intelligent agents run on my computer or on the World Wide Web?
- Where can I find intelligent agents?
- Are there books about Bots?
- What is BotKnowledge?
- What information will BotKnowledge give me?
- How do I contact BotKnowledge?
- Will BotKnowledge come to me?
- What kinds of bots does BotKnowledge track?

What is a bot?

The term originates from the earlier classification of intelligent agents as "knowledge robots", which subsequently got shortened to just "knowbots" or even "bots". In short, "bot" is just another term for intelligent agent. Today most people use the terms intelligent agent or bot interchangeably.

What is an Intelligent Agent?

An Intelligent Agent, or bot, is a piece of software that can autonomously accomplish a task for a person or other entity. The software has some sort of "trigger" built into it and, once executed, the agent can carry out its function without further intervention. Some only count as intelligent agents those software programs which meet very strict criteria, but more and more people are accepting a more lenient definition of intelligent agent. The key ingredient is that the software program accomplishes some task autonomously once triggered.

What kinds of things can Intelligent Agents do?

Intelligent agents can perform many useful acts. Today's agents can, for example: 1) search for information automatically; 2) answer specific questions; 3) inform you when an event (e.g., an article has been published, your favorite book is on sale, the road you travel is under construction, your name has been mentioned on the web) has occurred; 4) provide custom news

to you on a just-in-time format; 5) provide intelligent tutoring; 6) find you the best prices on nearly any item; 7) provide automatic services, such as checking web pages for changes or broken links.

What do Intelligent Agents cost?

Some agents may cost thousands of dollars, or just a few bucks. However, many agents are free, paid for either by advertising or venture capital. In the midst of this intelligent agent boom, there are many agents that can be used for free - many of these agents' links can be found here at BotKnowledge.

Do intelligent agents run on my computer or on the World Wide Web?

Agents can execute either on the web or from your local machine. Many agents function right from the web while others must be downloaded and used from your local machine. There are also some agents which do not need to have the World Wide Web to function, but the most useful ones do involve using the web to find, filter and fuse information.

Where can I find intelligent agents?

There are many intelligent agents available, mostly over the web. The BotKnowledge website is a place where you may find many links, descriptions, reviews and information about intelligent agents. You may also subscribe to the BotKnowledge free newsletter to keep up on developments in the area of intelligent agents.

Are there books about Bots?

Yes, many books are being written about this new area of computer assistance, intelligent agents. BotKnowledge will provide reviews of these books at the BotKnowledge website.

What is BotKnowledge?

BotKnowledge is a website dedicated to providing its users with the latest

information related to Bots, and Artificial Intelligence. Our newsletter, bot reviews, bot lists, bot descriptions, and bot uses will keep you informed.

What information will BotKnowledge give me?

BotKnowledge will provide you with all the knowledge you need about bots. We will tell you about the bots, their functions, how to use them, and where to find them.

How do I contact BotKnowledge?

The people of BotKnowledge are eager to communicate with you. You may contact us by [clicking here](#).

Will BotKnowledge come to me?

The people of BotKnowledge will gladly come to your school or business to present and discuss the exciting world of bots. You can find out about our recent presentations by [clicking here](#). The people at BotKnowledge can also program bots to help your efficiency and productivity at your school or business.

What kinds of bots does BotKnowledge track?

BotKnowledge studies many different types of bots. The bots are categorized for your convenience. To see the bots we have referenced, [click here](#).

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11. Related Proceedings Appendix - None